

Amendment to the Claims

1 (Currently Amended). A router for coupling into a computer network along which network traffic flows in a form of packets, wherein the network comprises a first management system, the router comprising:

at least one monitoring circuit coupled to the network, wherein the at least one monitoring circuit is operable to examine packets communicated to the router and to provide network information associated with selected ones of the examined packets;

circuitry for processing the provided network information based on a first type of analysis requested by the first management system and based on a second type of analysis requested by at least one node coupled to the network; and

circuitry for including ~~the~~ processed network information based on the second type of analysis into one or more packets; and

circuitry for transmitting processed network information based on the first type of analysis to the first management system and transmitting the one or more packets with processed network information based on the second type of analysis over a data path in ~~along~~ the network to ~~the~~ at least one node coupled to the network, wherein the at least one node is included within a second management system of a second network and is outside of the first management system.

2 (Currently Amended). The router of claim 1:

wherein the first management system comprises a plurality of nodes operable to communicate according to a network management system protocol.

3 (Original). The router of claim 2 wherein the network management system protocol is selected from a group consisting of a Simple Network Management Protocol, a Common Management Information Protocol, and a Common Object Request Broker Architecture protocol.

4 (Currently Amended). The router of claim 2 wherein the first management system comprises a network management system/clement management system.

5 (Currently Amended). The router of claim 1:  
wherein a set of transmitted one or more packets correspond to a set of packets received at the router; and  
wherein the circuitry for transmitting is for transmitting the one or more packets within a desired time period ~~60 seconds~~ of when the router receives the set of packets received at the router.

6 (Canceled). Please cancel claim 6.

7 (Currently Amended). The router of claim 1 wherein the circuitry for transmitting is further for transmitting the one or more packets along the network to at least one node that is part of the first management system.

8 (Currently Amended). The router of claim 1:  
wherein the circuitry for transmitting is further for transmitting the one or more packets along the network to a plurality of nodes coupled to the network; and  
wherein the plurality of nodes are outside of the first management system.

9 (Currently Amended). The router of claim 1, and further comprising:

wherein the circuitry for transmitting is for transmitting a first set of the one or more packets along the network to a first respective node coupled to the network;

wherein the circuitry for transmitting is for transmitting a second set of the one or more packets along the network to a second respective node coupled to the network; and

wherein the first respective node and the second respective node are outside of the first management system.

10 (Previously Presented). The router of claim 9:

wherein the first set of the one or more packets corresponds to a first type of analysis performed by the circuitry for processing the provided network information; and

wherein the second set of the one or more packets corresponds to a second type of analysis, different from the first type of analysis, performed by the circuitry for processing the provided network information.

11 (Original). The router of claim 1:

wherein the at least one monitoring circuit is operable to examine packets in response to a set of criteria; and

wherein the selected ones of the examined packets correspond to packets that satisfy the set of criteria.

12 (Original). The router of claim 1 wherein the network comprises the global Internet.

13 (Original). The router of claim 1 wherein the network is selected from a group consisting of a cell-based network and a packet-based network.

14 (Previously Presented). The router of claim 1 wherein the provided network information comprises information copied from the examined packets.

15 (Previously Presented). The router of claim 1 wherein the provided network information comprises information not included in the examined packets.

16 (Previously Presented). The router of claim 1 wherein the provided network information is selected from the set consisting of packet time of arrival data, port arrival data, number of discarded packets, error packets, port utilization, and buffer utilization.

17 (Currently Amended). The router of claim 1 and further comprising a plurality of routers, and wherein each router in the plurality of routers is for coupling into the computer network, and wherein each router of the plurality of routers comprises:

circuitry for processing the provided network information based on a first type of analysis requested by the management system and based on a second type of analysis requested by at least one node coupled to the network; and

circuitry for including ~~the~~ processed network information based on the second type of analysis into one or more packets; and

circuitry for transmitting processed network information based on the first type of analysis to the management system and transmitting the one or more packets with processed network information based on the second type of analysis over a data path in ~~along~~ the network to the at least one node coupled to the network, wherein the at least one node is included within a second management system of a second network and is outside of the management system.

18 (Previously Presented). The router of claim 17 wherein at least two of the routers in the plurality of routers are operable to include respective processed network information into a respective set of one or more packets for transmission to a same destination node.

19 (Currently Amended). The router of claim 18 wherein the same destination node is outside of the first management system.

20 (Currently Amended). A method of operating a router that is coupled into a computer network along which network traffic flows in a form of packets, wherein the network comprises a first management system, the method comprising:

operating a monitoring circuit to examine packets communicated to the router and to provide network information associated with selected ones of the examined packets;

processing the provided network information;

including the processed network information into of one or more packets; and

transmitting the one or more packets along the network to at least one node coupled to the network, wherein the at least one node is included within a second management system of a second network and is outside of the first management system.